
Orient aviation
Vol. 26 No. 7 September 2019
orientaviation.com
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Orient aviation 25 YEARS

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Airlines across Asia hit hard by political strife

The Sino/U.S. trade war, the Japan-South Korea dispute and political upheaval in Hong Kong are wiping millions off the balance sheets of several airlines in the region, most particularly in North Asia.

With Hong Kong protests extending into their fourth month as we go to press, Hong Kong-based airlines as well as scores of carriers flying into one of the region's most profitable hubs, are witnessing passenger load factor going through the floor on some crucial business and leisure routes. Air cargo, while healthier in some markets, is continuing its decline in the world's biggest air freight centre.

Protestors targeting aviation, an industry vital to Hong Kong's economic health, is unforgivable. In this case, as in Japan and Korea, the airlines serving the airport are victims of politics. And mostly they can do very little about it.

The U.S.-Sino trade war has had a serious impact on air freight business across the region. Asian airlines carry 35% of global air cargo. A lot of that cargo flies in the bellies of passenger aircraft. The images international travelers, whether leisure or business passengers, are seeing from their living rooms is a Hong Kong, always regarded as a highly functional metropolis, in disarray. It has become a place to avoid for many.

The Japan-South Korea conflict has forced airlines to cancel or downsize aircraft on routes between the two countries, to the detriment of the bottom lines of all carriers involved.

International Air Transport Association vice president, Asia-Pacific, Clifford Conrad, told Orient Aviation last month "the U.S.-China tensions, coupled with the performance of the Chinese economy, are contributing to the weak cargo performance in the region".

"The situation could worsen depending how the trade dispute between Japan and South Korea plays out. Potentially, it could impact the supply chain networks of the electronics market, an important segment for air freight," Clifford said.

It has been said so often that there are no winners in a trade war. The same applies to occupying an airport and forcing flight cancellations or delays for thousands of passengers. In the case of Hong Kong, the series of departure and arrival precinct occupations and blockades on routes that approach the airport achieved the own goal of damaging Hong Kong's reputation and therefore its economy.

Also to be considered are the huge costs incurred by carriers to accommodate stranded passengers, divert flights around the region and keep staff moral intact during the confrontations. This is not the way to win hearts and minds to a cause. ■

TOM BALLANTYNE
Associate editor and chief correspondent
Orient Aviation Media Group

Air New Zealand's Luxon shifts professional gears

Christopher Luxon will bow out as Air New Zealand CEO later this month after leading the airline through one of its most successful periods in recent history.

But before his September 25 departure from the carrier, he warned changed times were ahead for Air New Zealand and global aviation.

Chairing his last results press conference on August 22, he said: "We are focused on ensuring Air New Zealand is fit for the newer growth environment," inferring lower profits were ahead.

For the latest full fiscal year, Air New Zealand (Air NZ) reported earnings before tax of US$236.9 million, a 31% decline over the previous 12 months. Operating revenue grew by 5.3%, but growth was offset by a $121 million increase in fuel costs and a temporary escalation in operating expenditure as the airline "sought to improve network resiliency" caused by global Rolls-Royce engine issues.

The 51% government-owned airline expected full fleet and network reliability to be restored after the last of the Rolls-Royce engines, chosen to power the airline's 787s, return to service.

Luxon, Orient Aviation's 2014 Person of the Year, succeeded Rob Fyfe as CEO in January 2013.

He has always fostered innovation and diversity, including going outside the airline business, to the Disney Group, to benchmark higher

standards of service at the carrier.

He also is a member of a tiny airline CEO club that boasts a board that is 40% female.

Cathay Pacific CEO's baptism of fire as protests continue across Hong Kong

A fortnight into his new job as CEO, Augustus Tang's leadership of Cathay Pacific has been tested at every level of the airline group's operations. In the four weeks since July 26, staff have been stretched to the limit as the airline struggled, and succeeded, in restoring full flight operations and service after occupations firstly at the airport and later in adjacent precincts and on roads and trains servicing Cathay's home hub.

At press time, Cathay Pacific parent, Swire Pacific, announced Tang would have a new chairman, Patrick Healy, following the resignation of current chairman, John Slosar.

Sixty three-year-old Slosar has spent 39 years with the Swire group working in Hong Kong, China, the U.S. and Thailand. He was CEO of Cathay Pacific for three years from mid-2011 and appointed Swire Pacific chairman from 2014 to earlier this year. He will have held the position of the airline group's chairman for more than five years when he steps down in November.

Tang, who has spent the last 11 years as CEO of HAECO, the wholly-owned MRO arm of the Swire Pacific Group, joined the conglomerate in 1982. He has worked in several departments at Cathay and Cathay Dragon (then Dragonair) and in Malaysia and Japan. He was part of a small group of well-regarded high flyers that included future CEOs, Philip Chen and Ivan Chu.

In a letter of August 23, emailed to the members of the airline's loyalty program, the Marco Polo Club, Tang said: "the events that have transpired in recent weeks have been some of the most challenging we have ever experienced, both as a city and as an airline.

"However, we face these challenges in the knowledge that Hong Kong and Cathay Pacific have overcome many challenges throughout our 73-year-old history, each time emerging stronger as a result. I believe this time will be no different."

In mid-August, regulators at China's Civil Aviation Administration of China (CAAC) informed Swire Pacific chairman, Merlin Swire, and the group's leadership team of its dissatisfaction with the response to staff members who supported Hong Kong's anti-government protests.

Framed as a safety issue, Beijing's unhappiness cost popular CEO, Rupert Hogg, his job along with chief customer and commercial officer (CCO), Paul Loo. Both resigned on August

Asia-Pacific air growth to suffer from political and tariff tensions

The International Air Transport Association's (IATA) latest airline industry report said the Asia-Pacific had a 37.1% share, or 1.6 billion customers, of the global airline passenger market to December 31, 2018, an increase of 9.2% over 2017.

The region's nearest competitor was Europe at 26.2% or 1.1 billion passengers, followed by North America (22.6%/989.4 million passengers), Latin America (6.9%/302.2 million passengers), Middle East (5.1%/224.2 million passengers) and Africa at 2.1% (92 million passengers).

IATA said: "the development of the low-cost sector continues to outpace the network carriers. Globally, LCC available seat capacity grew 13.4% [in 2018], which was double the overall expansion of the industry at 6.9%" for the same period.

LCCs accounted for 21% worldwide capacity last year.

Asia continued to lead the global growth table with the world's top five international/regional pairs operating within the region.

They are Hong Kong-Taipei Taoyuan (1), Bangkok Suvarnabhumi-Hong Kong (2), Jakarta Soekarno-Hatta - Singapore Changi (3), Seoul Incheon-Osaka Kansai (4) and Kuala Lumpur International-Singapore Changi (5).

The world's leading five airports for domestic city pairs were Jeju-Seoul with 14.5 million passengers, followed by Fukuoka-Tokyo Haneda (7.6 million), Melbourne-Sydney (7.6 million), Sapporo-Tokyo Haneda (7.3 million) and Beijing Capital-Shanghai Hongqiao (6.4 million).

IATA said "second quarter

Recently, Luxon decided to employ staff with visible tattoos, "a big and difficult decision", he said.

"There are 200 commercial airlines in the world and not a single airline allows their employees visible tattoos. We are now trailblazing and leading there," he said.

Luxon confirmed to Orient Aviation at press time that he would take a break in the antipodean summer "to think very clearly and intentionally about what I want to do next". His reported inclinations include working in the not-for-profit sector, moving overseas if he decides to continue in business or a career in politics. ■

16. Supporting Tang is new CCO, Ronald Lam, who had spent barely a month as CEO of Cathay's newly acquired LCC, HK Express, before being recalled to the mainline carrier. Lam also is the new chairman of HK Express and Cathay executive, Mandy Ng, its CEO.

Swire Pacific director of corporate affairs, James Tong, has added the role of director of Cathay Pacific corporate affairs to his responsibilities.

Since the CAAC dressing down, at least 20 employees at the two airlines and its subsidies have been sacked, allegedly for expressing views that support Hong Kong protestors.

Tang's immediate tasks will be to arrest a decline in passenger bookings, boost collapsed staff morale and keep the CAAC happy. ■

financial performance improved in the North American region, which is dominating the relatively small sample of airlines that have reported so far". ■

REGION'S AVIATION ROILED BY HONG KONG PROTESTS AND TRADE CONFLICTS

Issues as diverse as sustained protests in Hong Kong, a trade war focused on the region's largest economy, shaky global productivity and deepening losses at airlines once revered as industry leaders are flooding the aviation landscape. As always, many of the problems confronting the region's carriers are beyond their control. Associate editor and chief correspondent, Tom Ballantyne, reports.

Weeks of protests in the heat of Hong Kong's humid summer have sent shock waves through the region, with the demonstrations forcing the cancellation of more than a thousand flights at one of the region's busiest and most prestigious airports.

The impact of the crisis will certainly hit the bottom line of all carriers that fly to and from the Special Administrative Region (SAR), but Hong Kong is only one focus of developing difficulties for carriers.

Despite predicted significant growth, the industry is facing several challenges from an economically flagellating tariff war between the U.S. and China to a serious trade dispute between Japan and South Korea and forecast bigger losses at several Asia-Pacific airlines, including flag carriers legendary for their quality until the recent past.

"It has been a difficult few months and it could get tougher," the International Air Transport Association (IATA) vice president Asia-Pacific, Conrad Clifford, told Orient Aviation last month. "Asia-Pacific airlines are operating with a thin 2.3% margin, which can be wiped out easily with shocks to the operating environment.

"The recent shutdown of HKIA (Hong Kong International Airport) is one such example, with airlines incurring additional costs from accommodating stranded passengers, diverting flights and disrupting their flight schedules across their networks. Although the disruption was over in two days, it can take up to two weeks for things to return to normal."

Clifford said broader issues also are affecting the industry. "Trade tensions, particularly between the U.S. and China, are hurting the industry. Air cargo markets have contracted by 3.6% globally in the first six months of this year. Asia-Pacific carriers, which have a 35% share of the world's air cargo market, were hardest hit with a 7.4% fall in freight demand compared with the same period last year," he said.

"The U.S.-China tensions, coupled with the performance of the Chinese economy, are contributing to the weak cargo performance in the region. The situation could worsen depending how the trade dispute between Japan and South Korea plays out.

"Potentially, it could impact the supply chain networks of the electronics market, an important segment for air freight."

On the positive side, Clifford said passenger demand remains strong, growing at 4.8% in the Asia-Pacific. "But growth is not as strong as a year ago, a result of U.S.-China trade tensions and economic uncertainty in other regions," he said.

The seriousness of the Hong Kong situation for airlines cannot be underestimated. Four of the world's ten busiest international air routes involve the city, including the world's busiest international/regional city pair, Hong Kong-Taipei. Three out of the other four city pairs in the world's top five list are Hong Kong-Shanghai, Hong Kong-Seoul Incheon and Beijing-Hong Kong.

In Hong Kong, protestors are no longer allowed into the airport, but an updated report from ForwardKeys, which analyses more than 17 million flight bookings a day, revealed

> Events in Hong Kong in the last two months did not substantially impact our passenger business in July, however, we anticipate a much more significant impact to our revenue in August and onwards. Traffic into Hong Kong, both business and leisure, has weakened substantially. We also have seen ex-Hong Kong traffic starting to soften, especially on our short-haul network including mainland China, Taiwan, South Korea and Southeast Asia

Ronald Lam
Cathay Pacific Airways chief customer and commercial officer

the protests had resulted in a massive fall-off in airline bookings into Hong Kong from Asia.

"In the almost eight weeks from June 16 to August 9, which has been marked by a two million strong protest march accompanied by a general strike and riots on June 16, the siege of police headquarters, the storming of the Legislative Council building on July 1 and more recently, physical clashes between police and protestors that resulted in arrests, has meant several countries were warning against traveling to Hong Kong," it said.

"Flight bookings to Hong Kong from Asian markets have fallen by 20.2% over the equivalent period last year," recorded ForwardKeys. "In the first fortnight from June 16-29, bookings fell 9%. In the second two weeks, from July 30 to 13, it was 2.2%," it said.

"At that point, it appeared the demonstrations were having a short-term impact on short-haul travel. However, in the following 27 days, July 14 to August 9, there has been a dramatic drop in bookings, by 33.4%.

"There is clear evidence the protests have reversed a positive travel trend in which bookings for the first six and a half months of the year were up 6.6% over 2018."

Cathay Pacific's most recent statistics, for July, revealed passenger numbers rose by 4%. But the carrier is steeling for its August results and the passenger trends it will indicate for the final three months of the year.

Not surprisingly, given the worsening trade disputes in the region, Cathay's cargo uplift dropped 8.2% in July. It will likely worsen as a significant amount of freight is carried in the belly of passenger aircraft that support the world's biggest cargo hub.

While HKIA won support from Airports Council International Asia-Pacific, whose membership said it "stood in solidarity" with the airport and condemned the disruption, words can't compensate for the damage being done to Hong Kong's hub status.

Several analysts warned foreign investors would be thinking twice about setting up in Hong Kong. The SAR's second highest ranking government official, chief secretary, Matthew Cheung, said HKIA was "the trunk" of Hong Kong's business and the disruption threatens its reputation as a travel and transport center. The airport handled 75.3 million passengers in 2018, making it the world's second busiest international airport after Dubai.

Meanwhile, icy trade relationships between Japan and South Korea are impacting airline operations. This dispute arose from a 2018 South Korean Supreme Court ruling that ordered Japanese companies to compensate those subjected to forced labor during Japan's colonial rule, from 1910-1945, of the Korean Peninsula. Japan rejected the ruling and in August Tokyo said it would revoke Seoul's preferential status as a trading partner for the purchase of goods that could be diverted for military use. Japan cited security concerns.

Seoul argued Japan was acting in retaliation to the court ruling. Since early July, Japan has tightened controls on South Korea-bound exports of key materials for the manufacture of semiconductors and display panels. The semiconductor industry is a key engine of South Korea's economy.

The impact has been substantial. Air passengers on routes between South Korea and Japan dipped during the peak summer cycle amid the escalating bilateral trade dispute. Load factor for Korean flights to and from Japan averaged 71.5% during the first week of August, down from 84.5% a year earlier, Korea's Ministry of Land, Infrastructure and Transport said. Japanese authorities have reported South Korean tourists visiting Japan have declined to their lowest level in nearly a year.

Visitor arrivals from South Korea to Japan dropped 7.6% in July from the corresponding month a year ago, said the Japan National Tourism Organization. It was the lowest inbound rate since September last year when flooding from a typhoon closed Kansai airport and a strong earthquake struck Hokkaido. South Koreans also are boycotting Japanese products, from Asahi beer to Uniqlo clothing.

Affected airlines are cancelling flights or downsizing aircraft on routes between the two countries. Korean Air has suspended services to several Japanese cities, including Busan-Osaka, Jeju-Narita, Jeju-Osaka, Incheon-Komatsu and Incheon-Kagoshima. At the same time, it is increasing frequency into Southeast Asia, Oceania and China.

U.S. president Donald Trump has called on Tokyo and

Seoul to improve relations, saying intensifying tensions between the two countries put the U.S. in a "bad position". He told reporters at a White House briefing the two countries were fighting all the time and "they're supposed to be allies". The U.S. fears tensions between Japan and South Korea, both key U.S. allies, could alter long-standing economic and security structures in the region to the potential benefit of China and North Korea.

In the meantime, the Sino-U.S. tariff war rumbles on, punctuated by bouts of optimism that have lost momentum. A decision by Trump to delay imposing higher tariffs last month did little more than cause more nervousness and uncertainty, sparking a plunge in global stock markets and forecasts of widespread recession.

It hardly bodes well for any pick-up in crucial air freight markets in the region in coming months. ■

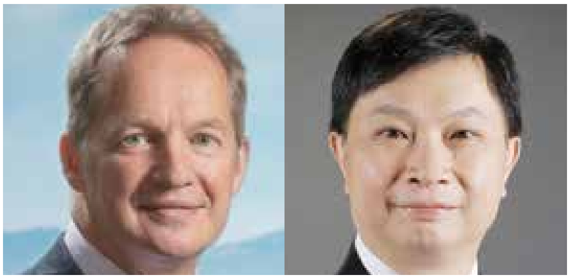
Only way was out for Cathay Pacific CEO

When the news broke on August 16 that Cathay Pacific CEO, Rupert Hogg, had resigned along with chief customer and commercial officer, Paul Loo, it was clear the airline group was in damage control mode. Hogg and Loo were popular bosses, but weeks of protests at the airline group's home hub of China's Special Administrative Region of Hong Kong and Mainland Chinese government demands for punishing aviation employees supporting anti-government demonstrations changed the operating landscape for Cathay and majority shareholder, property to aviation conglomerate, Swire Pacific.

Ten days earlier, at the announcement of the airline group's interim turnaround profit of HK$1,347 million (US$173.13 million), Cathay Pacific chairman, John Slosar, who will step down on November 6, said in reply to questions from the media, that what staff did outside working hours was their own business.

A few days later Beijing announced airline staff taking part in anti-government demonstrations in Hong Kong would be barred from crewing on flights to or over China. The Chinese regulator, the Civil Aviation Administration of China (CAAC), demanded the airline group take punitive action against staff favouring the protests.

The regulator ordered Cathay to submit information, for verification and authorization, of all crew members flying to the Mainland and required the management to deliver a plan to Beijing by August 15 that boosted Cathay Pacific and Cathay Dragon internal controls, flight safety and security. A CAAC statement said Cathay's actions, or lack thereof "have led to a severe threat to aviation safety, created negative social impact and increased the risk of flying from Hong Kong to the Mainland".



In the days leading to his resignation, Hogg wrote to staff and said the airline had "zero tolerance" for employees joining "illegal protests" and that disciplinary consequences would apply that may include termination of employment. The airline had to comply with the civil aviation authority's regulations, he wrote.

"Though people may share different views, it is essential we all respect each other, our customers and members of the public. We are aware this has been, and continues to be, a very challenging time for many of us who live in Hong Kong and call this incredible city home," he said.

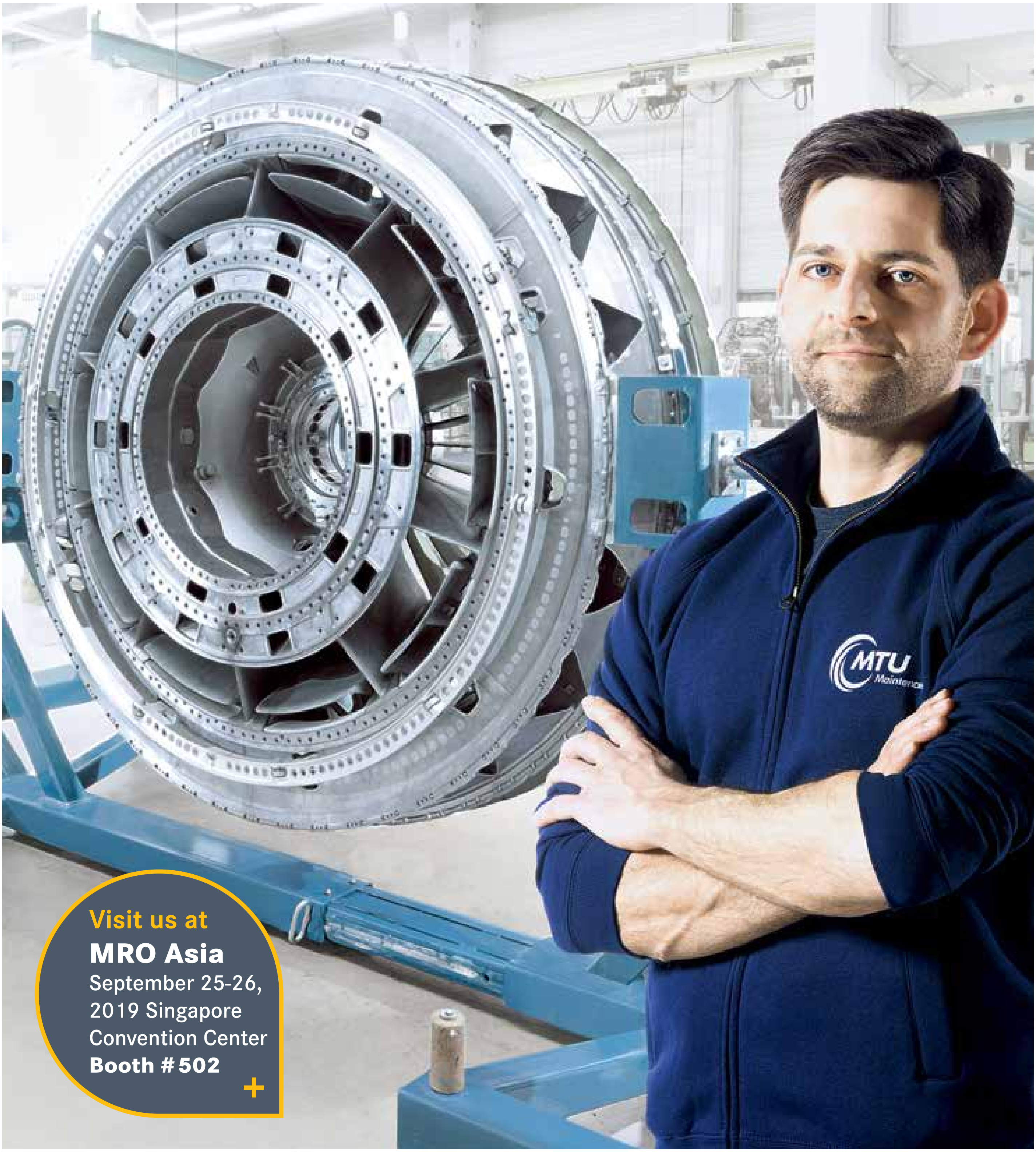
Separately, a statement from Cathay Pacific parent, Swire Pacific, said: "Hong Kong is our home. We have consistently and resolutely supported Hong Kong's development and remain fully committed to Hong Kong today. We share the vision of the Chinese Central Government for a vibrant Hong Kong within an integrated Greater Bay Area which will bring future prosperity and opportunity to the people and businesses of Hong Kong.

"We are supporting this vision with our own investment plans which remain ambitious across a wide range of industries in Hong Kong and more broadly across China. Swire Pacific is deeply concerned by the ongoing violence and disruption impacting Hong Kong," the statement said in part.

On August 8, the airline group reported its first profit for the January-June period since 2016 as it moved into year three of its transformation program. At the results announcement, it forecast higher earnings for the seasonally better second half. That prediction has turned to dust with early forward passenger numbers for the rest of the year down 35% compared with the same months a year ago.

Mainland flag carrier, Air China, owns 29.99% of Cathay. Other major shareholders are Swire Pacific (45%) and Qatar Airways (9.99%). In turn, Cathay holds 20% of Air China. The airline group does not disclose specific details of its mainland China business, but flights originating from the Mainland and Hong Kong are believed to account for significant revenue.

China is such an important market for Cathay and Cathay Dragon that analysts agreed the company had no choice but to accept the CAAC directive. ■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Beijing Daxing opening resets competition between "Big Three" carriers

By Will Horton

Beijing Daxing's opening at the end of this month will be lauded for being completed in five years. But those five years were long for aviation with airline developments that have changed the original strategy for the airport and upped the ante in the long-running plan of airlines to move from state control to market freedom.

It is appropriate to celebrate Daxing as the successful product of powerful central planning. The striking terminal building, designed by the late and heralded Iraqi-British architect, Zaha Hadid, has captured international attention as the largest single airport terminal building in the world. The gigantic project also has supporting infrastructure that includes new highways and a 160 km per hour high-speed rail link that will open with the airport.

Grand planning included resource allocation: China Eastern Airlines (CEA) and China Southern Airlines (CSA) will move their entire operations from Beijing Capital International Airport to Daxing. Each of the two carriers was intended to receive a 40% share of slots. Flag carrier, Air China (AC), was to remain at Beijing Capital.

But airlines decided such a cleanly delineated plan was not in their commercial interest. AC and CEA agreed to a slot swap: CEA would give AC a quarter of its

Daxing slots (10% of the airport's overall slots), which reduced the Shanghai-headquartered carrier's Daxing footprint to 30%. In return, AC would give CEA slots at Capital to keep its Beijing-Shanghai route at the older airport rather than moving it to Daxing.

CEA had long been concerned passengers prefer to fly out of Capital instead of trying Daxing. Its original plan called for Beijing-Shanghai flights to be moved last in an unusually protracted multi-year transfer period. CEA had invested significantly in infrastructure around Capital, perhaps a successful bid to establish deeper roots there.

AC's agreement with CEA is puzzling because it will be operating a split hub. The disadvantages of a divided hub is evident in CEA's split Hongqiao-Pudong hub in Shanghai. The counterpoint is a divide and conquer strategy. Or at the very least, AC is betting it can win incremental business from Daxing's different catchment area.

Daxing will bring efficiencies to Beijing aviation. Besides more self-service, automation and improved security flow, it will have a 60-minute minimum connection time for domestic-international and international-international flights. The terminal's shape should make each gate no more than an eight minute walk from the central node. Split levels allow for the co-location of domestic and international flights.

The benefits of Daxing's new design negatively contrasts with AC's at Capital Airport terminal three. Although it opened in 2008, it is clunky and often requires a train ride to reach gates. The fundamental design cannot be changed, but its facilities are being improved at the initiative of AC, a Star Alliance member, and the alliance itself.

People may prefer Capital because offices and hotels are near the road to the airport, but many of those businesses chose those buildings because of proximity to Capital. But any shift of the economic cluster from Beijing's northeast, in the direction of Capital, to Daxing in the south will take time.

Perception is a factor. Capital is much closer than Daxing to Beijing's core business district. Transport to Daxing may be faster because of its high-speed links, but the downtown terminus may still be inconvenient for some travellers.

CSA's exit from the SkyTeam alliance has added complexity to airline allocation at the airports. Before, Daxing was a clear SkyTeam hub with CEA and CSA holding 80% of slots. Now, Daxing's SkyTeam core is CEA's 30% presence. Foreign SkyTeam members can choose Daxing's reduced-but-still-hub status or Capital's perceived superior geography.

Oneworld members American Airlines (AA), Finnair, British Airways (BA) and Qatar Airways have bilateral relationships with CSA. Finnair will launch Daxing flights while maintaining its Capital service. BA and Malaysia Airlines (MAS) will relocate from Capital to


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Daxing. Qatar Airways has not announced its intentions. AA said it was considering options. The only other foreign airline to announce a change, as of press time, is LOT Polish Airlines. Like Finnair, it will operate flights from Capital and Daxing.

Chinese media has said foreign airlines may want to see Daxing develop more supporting infrastructure, especially hotels, before they move there.

At the start of Daxing's construction, LCCs were in vogue. The CAAC upheld Spring Airlines as a model of efficiency, promised sector reform and proclaimed LCCs would make significant market share gains. Momentum has been lost. Only CEA has a dual brand strategy, but it is unclear how they will be managed when both are at Daxing.

CSA will establish a new airline at Daxing, but it has not said if the carrier will be full-service or low-cost.

The balance of power in Beijing aviation could change depending on the outcome of HNA Group's restructuring. Subsidiary, Beijing Capital Airlines, will move to Daxing but its flagship carrier, Hainan Airlines, will remain at Capital.

In June, the Beijing municipal government took control of Capital Airlines. Previously, it had been a minority investor in the carrier. The agreement appears to ease HNA's financial position and save face. An announcement said HNA would recommend airline management while the Beijing government recognised the achievements of HNA and Capital Airlines.

Although AC is based at Capital, its ownership is with the central government and not the city level as at Capital Airlines. But the Beijing connections are close enough to have prompted speculation AC wants to consolidate the Beijing market and could gain an even larger Daxing presence through Capital Airlines.

There is speculation AC could end up with a bigger prize: Hainan Airlines. Until recently it was assumed the HNA flagship carrier would be all that would remain from the shell of HNA, but increasingly the chatter is that HNA may have to sell Hainan Airlines to come out in the clear.

Hainan's debt and complexity would not make for an easy takeover by AC and there is a school of thought that the transaction, if it happens, might be more by force than choice for AC. The potential to control multiple brands prompts the questions: should AC also have a low-cost unit, although passengers often perceive HNA carriers to be higher quality than their Mainland rivals?

What is certain is consolidation is necessary and the outcome of it should see airlines consider dual brand strategies. The airline presence at Daxing's opening may be far different to the composition of carriers at Daxing in five years if airlines continue to win healthy market control victories. ■

Climate change, talent shortfalls and infrastructure costs challenge Asia-Pacific airports

By chief correspondent, Tom Ballantyne

Climate change mitigation, staff shortages and best in class models for funding Asia-Pacific infrastructure were the major issues addressed at the Airports Council International (ACI) World 56th Conference of Directors General of Civil Aviation, Asia and Pacific in Kathmandu last month.

"We know the Asia-Pacific is no stranger to the effects of climate change, but it is a global challenge requiring a global response. ACI is taking a leadership role with its Airport Carbon Accreditation (ACA) Program," ACI World director general, Angela Gittens, told conference delegates.

The ACA program had recruited 282 participating airports, representing 43.4% of global traffic and 53 carbon neutral airports, she said. "Although the program started in Europe, which has the largest number of airports in the world, the Asia-Pacific has demonstrated its commitment to mitigating climate change with 54 accredited airports, representing 41.2% of passenger traffic, registered for the program. Six of the region's participating airports are carbon neutral," she said.

"The most recent Intergovernmental Panel on Climate Change report pointed out the aviation industry faces challenges with this issue. Our European airport community has formally committed to become net zero for carbon emissions under its control by 2050. ACI will ask the International Civil Aviation Organization (ICAO) to develop more ambitious CO2 reduction goals to meet the objectives of the Paris Agreement."

At the conference, Gittens also addressed the importance of investing in aviation's workforce. "The projected expansion of the sector in the Asia-Pacific requires attention to the recruitment and training of the necessary talent to run this engine," she said.

"ACI's Global Training program offers in-class and on-line courses, many in collaboration with ICAO, the International Air Transport Association and other institutions. I am pleased to report the Asia-Pacific has the most training centers and provides the highest number of courses [worldwide]."

Gittens reminded delegates of the capital gap that existed between the cost of new aviation infrastructure and the funding sources for it. "Airport capital needs are high. Based on a sample of 50 major economies, we are looking at required five-year investments of US$433 billion compared with $355 billion in planned airport investment, a shortfall of $78 billion," she said.

ACI does not advocate for specific ownership models, she said, but private capital has been successful in funding air service infrastructure development. Factors to be considered for private investment in airports include the value of air service to the economic vitality of a community or a nation and the competing needs for government funds in other sectors of individual economies.

"Economic regulation, if needed, should be proportionate to the objectives set by the government owner, including the incentives to facilitate commercial agreements between airports and their customers," Gittens said. ■


VIENNA
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December deadline for Project Sunrise pay deal "very ambitious"

Reaching a cockpit crew pay deal for non-stop Sydney and Melbourne flights to London and New York by year-end is not a given, Australia's pilot organisation warns.

By associate editor and chief correspondent, Tom Ballantyne

At press time, formal enterprise bargaining agreement (EBA) talks between Qantas and its pilots about pay and conditions for crewing Project Sunrise flights had just begun with the pilots awaiting an offer from the airline group.

Qantas Group CEO, Alan Joyce, has repeated often in the last six months that the business case for the ultra-long non-stop flights between Sydney and New York and London, must stack up and that getting the right pay deal from its pilots was essential to approval of Project Sunrise flights by year end.

At the turn of the month, Australian and International Pilots Association president, Mark Sedgwick, told Australian media the Qantas deadline would not influence the bargaining position of its members. "Sunrise is a decision for Qantas management to make. The timeline [of less than four months] at this point is very ambitious," he said.

Last month, the airline announced it would operate ultra-long haul research flights before the end of the year aboard 787-9s. The aircraft will collect data about inflight passenger and crew health and wellbeing, the airline said.

The October, November and December flights will be scheduled aircraft deliveries from Boeing, but instead of flying empty from Seattle to Australia, they will follow two Project Sunrise routes, from London and New York to Sydney, carrying about 40 passengers.

The journeys will be the world's first direct flights by a commercial airline from New York to Sydney and will mark the second time a commercial airline has flown directly from London to Sydney.

The Project Sunrise test flights were announced at the same time the airline group revealed its annual results, to June 30. It reported an underlying profit before tax of US$880 million for the 12 months, down by 17% from the previous year.

Domestic, international and the group loyalty program made money. LCC Jetstar delivered mixed results. Jetstar Japan brought in a record profit and Vietnam's Jetstar Pacific was profitable. Jetstar performed poorly and as did its regional flights in New Zealand.

Participants in Project Sunrise inflight research will be drawn mainly from Qantas's workforce with work designed by Sydney University's Charles Perkins Centre and Monash University.

Alertness, safety and productivity will be monitored by wearable technology devices at specific times during the 19-hour journeys. Scientists and medical experts from the Charles Perkins Centre will monitor sleep patterns, food and beverage consumption, lighting, physical movement and inflight entertainment to assess the impact on health, wellbeing and body clock of people flying for such long periods of time.

Melbourne's Monash University team will work with pilots to record crew melatonin levels before, during and after the flights. Pilots will wear an EEG (electroencephalogram) device that tracks brain wave patterns and monitors alertness. The aim is to establish data to assist in building the optimum work and rest patterns for pilots operating long-haul services.

Joyce said the flights will give medical experts the chance to do real-time research that will translate into health and well-being benefits. "Ultra-long haul flying raises several commonsense questions about the comfort and well-being of passengers and crew. These flights are going to provide invaluable data to help answer them," he said.

For customers, minimizing jet lag and creating an environment where they can experience a restful, enjoyable flight will be critical to the success of the routes. For crew, it will be about applying scientific research to determine the best opportunities to promote alertness when they are on duty and maximize rest during their downtime on the flights.

Airbus has pitched its A350-1000 for the proposed routes and Boeing the 777-8X. Go-ahead, apart from a new EBA with pilots, will depend on aircraft economics and regulatory approvals, Joyce said. ■

Indian Bollywood Actress smiles at Athens International Airport
Marble, 2019 A.D.

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VISTARA'

In a year of turbulent skies in India, full-service Vistara has accelerated its expansion to exploit the capacity gap left by the collapse of rival, Jet Airways. Associate editor and chief correspondent, Tom Ballantyne, reports from Singapore.

August was a landmark month for Vistara's Leslie Thng and his team at the Indian joint venture carrier. At just under five years old, the Tata-Singapore Airlines airline operated its inaugural international flight, from Delhi to Singapore, on August 7 while developing at the same time a fleet and partnership expansion that was unthinkable for the Gurgaon-headquartered carrier as recently as 12 months ago.

"From today onwards," Thng declared in Singapore, "Indian aviation will have a new symbol of the finest modern Indian hospitality in global skies with Vistara. As an Indian airline with a contemporary global outlook, Vistara is committed to making India proud in world aviation."

That is not just marketing speak from the CEO of India's newest international entrant - 51%-owned by Indian conglomerate, Tata Group, and 49% by Singapore Airlines (SIA). Thng is explaining his plans for the carrier to swoop on opportunities to expand created by the grounding and bankruptcy of full-service rival, Mumbai-based Jet Airways.

Vistara presently has a local market share of 5%. Its foreign airline rivals include market leader, Emirates Airline, at 14.6% followed by Etihad (6.2%).

"If you look at the end of the last financial year, which was March 31, we were 22 aircraft (A320-200s and A320neo). Now, we are 30 aircraft. In the span of a couple of months we have brought in eight aircraft," Thng said at a media briefing after the inaugural flight touched down in Singapore.

"It started at the end of May when we decided to introduce a different aircraft type into our fleet - the 737-800NG. We inducted the first 737 on May 3. From then until the end of July, we took in six 737s and then another one in early August. These are former Jet [Airways] 737s we are leasing from the respective lessors. Altogether, we have committed to nine 737s.

"In terms of expansion, we grew quite a lot in the last

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three months. That was, of course, because of the state of play in India where one airline's operations were suspended. There was a need to restore some of the capacity, especially full-service capacity.

"Back then, three months back, we decided the most effective way to increase capacity was to bring in the 737, which is readily available in the Indian market. The crew required to operate the 737, whether it was the tech crew or cabin crew, also were available. We recruited almost 600 former Jet employees to Vistara in a month." New joiners included more than 100 pilots and 300 cabin crew trained to operate 737s.

Thng holds a Bachelor Degree in Business Administration from the National University of Singapore and began his career with Singapore Airlines in 1999. A former chief executive of SIA regional subsidiary, SilkAir, he took charge of Vistara in October 2017, succeeding Vistara's founding CEO, Yeoh Phee Teik.

"When I say we have 30 aircraft, if you fast forward to the end of this calendar year we will be looking to take delivery of another two 737s and nine more A320neos, which will increase our fleet to 41 aircraft, almost double that of March 31 this year. You can see we are growing very aggressively. Expanding very fast."

At the same time as the 737s were joining Vistara, Thng and his team were preparing for the launch of the airline's international flights, a process that required a different mindset, a different product and a different strategy, Thng said.

"It is not a walk in the park. It is a lot of co-ordination and a lot of planning. In the last couple of months, as we focused on expanding the domestic network, another team was working out how quickly we could do international," he said.

"For an airline as young as Vistara to do four international launches in August, starting with Delhi-Singapore, then Bombay-Singapore, Bombay-Dubai on August 24 and Delhi-Bangkok on August 27, with all the necessary approvals and product for the international operations on the different routes, was a significant achievement for my colleagues at Vistara."

Vistara's finances remain in the red, although its annual net loss improved from US$77.9 million in its 2017 year to $64.8 million in 2018, the latest Tata Sons annual accounts reported. Thng said: "We are still not profitable, but we are heading in the right direction to profitability. As to how soon we can be in the black, it is a constant update that I would need to give to shareholders."

Thng said it is unlikely the two shareholders will need to inject more funds into the carrier.

"Vistara is more focused on organic growth funded by the two shareholders. We have done our sums for the nine aircraft to which we have committed and are quite confident we can manage with what we have now. If we need to do a lot more then it is a different sum that we will have to evaluate. We do not think it is too much of a difference because financially performance is better than last year," he said.

Thng said the macro-economics of the Indian aviation ecosystem were "very challenging", whether it is high taxation or high infrastructure costs. "The government is fully aware of the situation. It is considering a preview of policies and initiatives and also dialogues with stakeholders to improve the aviation operating environment," he said.

"In its budget references to the industry, the government said it wanted India to be a global aviation hub. If you want to be a global aviation hub then the policies supporting Indian aviation have to be more progressive. They have to be reviewed and changed.

"I think government is trying to take care of that part. As for airlines, it is our responsibility to look into our own business model and cost structure. Vistara is a full-service carrier. Our cost structure is very different to low-cost airlines. Having said that, there is a market for full-service airlines domestically, especially between the metros and from metros to the big cities. It is the trend of the last four years."

Thng said whatever the differences between domestic and international flying, at Vistara they are closely linked. "Vistara will be a global international player but domestic is equally important. We need the domestic feed to support our international growth. At the same time, we must have an extensive network to form partnerships with other foreign carriers," he said.

The airline operates code-shares with SIA, Japan Airlines, British Airways and United Airlines. There will be other partners, Thng said. Providing a dense domestic network attractive to foreign airline partners is crucial to Vistara's

LCCs versus Vistara

India's domestic market is dominated by LCCs, but Thng is adamant Vistara will not be engaging in direct and costly competition with them. "International operations will be a different ball game for Vistara," he said.

"On the domestic front, it is what it is. With international operations we would like compare and compete with the major players, whether it is SIA, Cathay Pacific or Thai Airways.

"Low-cost will always be there for international, but we are going after a different market sector. What we want to achieve in the shortest possible time is to repeat what we did in the local market. We are the finest of the best Indian carriers."

future, he emphasized. An example of addressing this strategy is an increase in daily flights out of Bombay from 11 to 38 last month.

Entry into international skies is allowing Vistara to put its code on international airline partner flights. SIA previously had its code on Vistara domestic flights but Vistara could not do the same on SIA flights. Now it can. An extended code-share agreement with SIA will see the Vistara code on 44 SIA destinations across ten countries: the U.S., Australia, New Zealand, Japan, Taiwan, Malaysia, Indonesia, Thailand, Vietnam and Cambodia.

"That is the start with one airline. We also are in talks to put our code on other airlines' international sectors. India is a very big market. It's a very big source market. We believe we need a partner in every region where we fly," Thng said.

"SIA is a natural fit for Southeast Asia, even Australia, although we have our own plans to fly to Australia. But if we go to Europe, North Asia or the U.S. we will not have SIA to provide us with connectivity. There will be other airlines that will provide the connectivity."

To support international growth, Vistara intends to expand its domestic reach. "We are just 24 destinations within the country. The country is big enough. The population is big enough. There is nothing stopping us from going to 40 or 50 destinations. But we have to make it relevant for the full-service product that we want to offer," he said.

"We have to be dense enough to provide the frequency business travelers want, the connectivity to our own international flights and the connectivity to our airline partners who want to be with us. Airline partners will see value in how we serve India and how we serve South Asia. We will see value in the range of connectivity they can give us beyond our on-line points into the country.

"If we do go to Europe, we need a partner who can give us connectivity to 40 or 50 points within Europe. When we look at partners, I am sure they will be looking to Vistara for connectivity and the benefits customers can be offered."

Europe is far from being a distant dream. Vistara ordered 56 aircraft last year. "Our surrounding countries, where we can fly the A320neo for up to four or five hours, will continue to give us our network for international expansion. At the same time, we have factored in expansion beyond traditional narrow-body operations," said Thng.

"The A321 offers maybe another hour or so in range, but the 787-9 is the one that provides us with a lot of flexibility. From Delhi or Bombay we can go to Europe non-stop. We can go to North Asia non-stop. The 787-9, depending on how the aircraft is designed and configured, can fly from Delhi to Australia and the U.S. non-stop."

Opening European routes will put Vistara in direct competition with Emirates and Etihad and some smaller Middle Eastern carriers. They offer very cheap fares from India and onto Europe via their home hubs.

"How long will it take for Vistara to become one of the best in the global arena? It is what we have set out to do. If you want to achieve that goal, you should be competing against the big players. You should make sure that your product, your service and, to a certain extent, your cost structure is aligned so you can offer reasonable fares to the consumer. This is our intention," Thng said.

Thng does not believe Vistara's rapid domestic expansion threatens the airline's long-term viability. "After the suspension of Jet, the proportion of full-service capacity in the domestic market and the international market shifted.

Dreamliners to open Europe to Vistara

"In a nutshell, we have a plan for increasing our international network, although this year the focus mainly will be Southeast Asia, the Middle East and countries in South Asia. However, the B787s will begin delivery in the first quarter of 2020. We are talking about six months away.

"In six or seven months Vistara will be able to start long-haul, if we want to, from day one to let's say to Europe. We could start India to Europe because we will have the aircraft, the Dreamliners," Thng said.

On the domestic front, LCC penetration has increased because at this moment we are about 5% of the market share. Air India would be less than 20%. The market was dominated by low-cost," he said.

'But India is a market that is growing. The demand for premium product will continue to grow and there is a gap we are trying to fill in the market [since Jet's grounding]. Although we are bringing nine more aircraft into our fleet, considering the bigger picture, we have not really done that much.

"Similarly, at international, there is quite an extensive international footprint. We are still trying to recover some of it. I don't think we have overdone it. There is a lot more we can do. If you look at the entire full-service capacity of Indian carriers versus foreign carriers, there is a big gap. We need to catch up."

Interestingly, Thng is not averse to reviewing strategies intended to make the carrier more competitive. "Where you used to think you could apply a one size fits all approach, where we used to have only a three-class cabin – business, premium economy and economy – to serve all the Indian domestic market we are asking if that is still relevant," he said.

"Is it still suitable given the diversity of the market across the country? The economies of certain states can provide demand for a premium product. In certain states we are ahead of the curve. We are readjusting some of the product offering.

"But the business model will be full-service whether passengers fly on a three-class aircraft, two-class on the 737 or if we introduce an all-economy product. Depending on the

point that we serve, if we decide the market is mainly or predominantly economy class then it is likely we will operate a single class all-economy product on these routes.

"It does not mean all-economy is low-cost. You will still enjoy a full-service product, but there will not be options of business and premium economy available because the demand is not there - at the moment. We are adjusting strategies to make sure we are more relevant to specific markets."

Vistara has a lot of competition, particularly from the Gulf carriers that offer low fares for full service flights. Will Vistara continue to operate a dual single-aisle fleet – A320s and 737s – over the longer term? "That remains to be seen. The arrival of Jet's 737s was opportunistic. They are on short-term leases of one to four years. "We will review them later on," Thng said.

"We made the decision to do a dual fleet because of recent events. Going forward, we will decide on a dual fleet or a single fleet, depending on the scope of expansion.

"I believe if we have a decent size there is nothing to stop you operating a dual fleet as long as you extract good economics from it. There will be some inefficiency in MRO and the commonality of cockpits, but if you do your sums and it makes sense, why not?

"Right now, we are continuing with the dual fleet, at least for the next one to four years. Definitely, we will review it when we need to commit ourselves to another aircraft order. The order we did last year only covers us to 2023.

"Vistara will not stop growing. We are in constant dialogue with the aircraft manufacturers. It depends on the offer they make to us. When we need to order to accelerate beyond 2023, we will do it at an appropriate time."

"This is just the start," Thng said. "We will not stop. There is more we want to do and that is why we have ordered 56 aircraft. It depends on opportunities in the market or if we can grow faster and expand more aggressively than we envisaged last year.

"It was never planned to have a dual fleet of narrow bodies. But if it helps Vistara accelerate growth, we will do it." ■

Last ditch efforts to rescue Malaysia Airlines

To keep humbled Malaysia Airlines in the air, its government owners have hired a global bank to construct a survival strategy for the carrier, reports associate editor and chief correspondent, Tom Ballantyne.

After several chief executives, including two from overseas, have failed to revive Malaysia Airlines (MAS) the carrier's government owners have enlisted global investment bank, Morgan Stanley, to explore strategic options for the airline, including a partial sale to strategic investors.

The news was made public as the fate of the carrier continues to be uncertain following comments earlier this year by the country's prime minister, Mahathir bin Mohamad, that closure might be an option.

"We have changed the management of the airline many times. Everyone promised they could turn round the company. In the end, they all failed," he has said.

In late July, Malaysian deputy minister, Mohamed Farid Rafiq, confirmed the government's sovereign wealth fund, Khazanah Nasional, had brought in Morgan Stanley and would like recommendations from the bank by year-end.

Whatever Morgan Stanley puts forward, MAS's future is uncertain. In March, without disclosing specific financial details, the airline said 2018 had finished with "a marginally lower loss compared with a year ago". The reported 12 months had been challenging because of crew shortages, intense competition "with supply outstripping demand", volatile fuel prices and foreign exchange losses, it said.

Last year, six of Malaysia's seven carriers were unprofitable and the seventh, AirAsia, generated its smallest operating profit in four years.

It is reported MAS is working on yet another turnaround plan after missing targets set in the five-year recovery strategy scheduled to conclude later this year.

In late August, one mooted savior of MAS ruled itself out of any buy-in. Qatar Airways Group CEO, Akbar Al Baker, said, while visiting the Malaysian island of Langkawi, that he would not invest in MAS.

Shutting MAS is not feasible politically, although the Malaysian market does not need three airline groups. It is hard to imagine a sale will succeed given the financial state of the Malaysia Airlines Group and the sluggish Malaysian economy.

Another phase of restructuring, which must proceed without political interference, is considered the most likely scenario for the airline group.

Operating in the Malaysian aviation market is not about to get easier for MAS. Competition between local carriers is fierce and successful intrusion from non-Malaysian carriers into the market, supported by sixth freedom traffic through Kuala Lumpur International airport, is eroding MAS's market share.

Options outlined for MAS since Mahathir initiated a review of the carrier earlier this year are another restructure, an additional injection of funds, a strategic investment from outsiders, that might include Japan Airlines, or closure of the carrier.

The preferred option is signing up a strategic partner. The government is willing to relinquish majority control of MAS as long as the airline can maintain its identity as a national carrier. In July, Mahathir confirmed the above four options and said the government was studying them.

A central plank of the latest recovery plan is establishing joint ventures with foreign airline partners, with the goal of breaking even by 2022. MAS has signed Memoranda of Understanding with Japan Airlines (JAL) and Singapore Airlines (SIA). The joint ventures cover Kuala Lumpur-Tokyo Narita and Kuala Lumpur-Singapore routes, respectively.

Other potential areas of co-operation could be cargo and MRO services. MAS is awaiting regulatory antitrust approval for the two partnerships. It is understood the carrier hopes to be operating them in the final quarter of the year. ■

Tariff gloom – and cargo boom?

By Will Horton

Initial Public Offerings (IPO) logically tend to be in favour when a sector is at its peak or at least performing strongly. With receding cargo volumes and an escalating U.S.-Sino tariff war, it is an awkward time for China Eastern Airlines' (CEA) cargo division to pursue one.

Yet amidst overall cargo market negativity, there are pockets of optimism focused on the long-term. All Nippon Airways (ANA) is developing its first intercontinental air cargo market now it has 777 freighters.

Local rival, Japan Airlines (JAL), is starting a block space codeshare between Tokyo and Chicago on freight specialist, Kalitta Air. China Airlines (CAL) is making its debut as a 777 freighter operator with a plan to order six. China Southern Airlines (CSA) has converted orders for two passenger 777-300ERs to freighters, adding to its existing fleet of 12.

While airlines see opportunity, there is another factor in play: Boeing needs to sell 777s. The freight variant of the 777 family has become the better seller as demand naturally wanes for the current 777 passenger aircraft, soon to be outdated by the 777X's leap in efficiency.

In 2018, the 777 freighter had its best sales year with orders for 45. The 777 freighter has 12 confirmed orders to last July, reported DSM data. There is no competing long-range freight offering from Airbus.

Expectations for the 777 freighter increased in July when Boeing announced it would produce more 777 freighters while it holds off on 777X production due to an engine delay. In 2020, Boeing intends to increase the 777 production rate from 3.5 aircraft a month to five.

ANA expects to focus on freight that cannot easily, or at all, be carried in passenger aircraft bellies including lithium-ion batteries, pharmaceuticals and over-sized items. These categories of freight tend to attract a substantially higher yield, justifying the operating cost of dedicated freighters.

ANA is unique among combination carriers for providing separate statistics for cargo aircraft performance. Its international freighters, in the three months to June 30 and before the 777 freighter started service, generated a yield of JPY35.6 per revenue tonne kilometre, 41% higher than the JPY25.3 average yield for combined passenger belly and freight aircraft cargo. Freighters had a load factor of 64%, eight percentage points higher than belly freight.

So while ANA gains from freighter operations, it has downside protection because its dedicated freight exposure is limited. Only 22% of ANA's international freight is carried on freighter aircraft. The 777 freighters will increase the share, but passenger aircraft growth in 2020 will swing the statistics back. Belly capacity still rules.

CEA's developing freight network carried 36% of cargo in freight aircraft. At Cathay Pacific, just under half of cargo is carried on freighters. CEA's freight arm, China Cargo Airlines (CCA), has six 777 freighters on leases it expects to renew, according to the prospectus of Eastern Air Logistics, which owns CCA.

While there was far greater tonnage in bellies than freighters, the freighters generated 67% more revenue in 2018. That is a strong argument for the prospectus saying an unidentified number of additional 777Fs will be acquired. There is a hint of large ambition since the prospectus also says it will acquire two spare GE90 engines. CCA has one spare engine for six 777Fs.

The additional 777Fs will help Boeing bridge production. After the air framer secured a commitment from CAL, only Asiana Airlines and Singapore Airlines remain as major Asian freight operators that have not re-fleeted.

AC has eight 777Fs and three 747Fs as well as short-haul freighters. CSA has 12 777Fs with two more due for delivery, as well as two 747Fs. CCA's six 777Fs are supplemented by three 747Fs, making CEA the smallest freight division of China's "Big Three" carriers despite being located in China's cargo centre of Shanghai, which handles more cargo than any other mainland city. "The status of Shanghai's freight hubs can guarantee a leading position in the industry," the prospectus said in Chinese.

CCA's 747Fs will evidently stay in service despite their age and two of them having leases expiring soon. In August, CCA signed a five-year maintenance agreement with Lufthansa Technik for the three 747Fs.

CEA's freight arm will transition from the smallest to the biggest on the Mainland. It is blessed with Shanghai's geography and is investing in hardware, but the prospectus outlines challenges. Its cargo tonnage only increased by 3% from 2016 to 2017 and the following year recorded almost flat performance. A contraction in cargo on freighters was more than offset by an increase in belly capacity.

Part of the challenge appears to be sophistication, evolving from handling easy but competitive freight types to higher-yielding but more complex cargo. That requires greater end-to-end control, an investment the IPO will enable.

The IPO expects to raise RMB2.4 billion (US$336 million). The single largest use of funds will be US$150 million for constructing the Pudong Integrated Aviation Logistics Center. The balance will be evenly split between upgrading freight stations, the spare engine purchase and then IT and R&D development.

"There is still a gap between the company's operating scale and multinational companies" in comparison to all-freight operators like FedEx, UPS and DHL, the prospectus said.

Compared with combination carriers like Cathay Pacific and Korean Air and increasingly Qatar Airways, CEA's cargo business has not branched out. Similar to its passenger business, the airline's cargo still seems to rely on flows to and from China without fully exploiting transfer opportunities, which can be a hedge if a major trade lane, like China-U.S., has sudden weakness. More available markets can help fill the "dead leg" of freight, the return to Asia that has lower overall demand and a weaker yield.

We'll probably build more current generation 777s, 777 freighters in that time frame. We have work to do to fill out the specific orders and delivery slots. The market signals are positive

Dennis Muilenburg
Boeing CEO

Reflecting the focus on China, 20% of revenue in 2018 was generated internationally, which grew from 16% in 2016.

The prospectus sounds all the right notes for diversifying cargo types to pursue higher-yielding freight: e-commerce, supply chain products and pharmaceuticals. All of those products more than doubled in volume for CCA from 2016 to 2018, posting faster growth than overall cargo volume. But combined, those three types accounted for only 1% of cargo by tonnage in 2018.

Fresh food products alone accounted for 14%, but those seem weighted towards the less lucrative inbound category, with the prospectus saying such types of fresh food include Chilean cherries and Canadian lobster. They were destined for customers at CCA's Shanghai home, as well as e-commerce behemoth JD.com.

CCA's five largest customers generate approximately 20% of revenue. They are Chinese freight forwarders and consolidators, as well as DHL. A top customer in 2017 was Inditex, the Spanish clothing company that includes Zara.

On the cost side, the largest supplier is part-owner CEA, which charges for the big and necessary aircraft maintenance and also the small and less evident costs such as trademark licenses, ULDs and even freighter pilot meals.

The detailed expenses are the result of spinning out freight from the rest of the airline, which other airlines have not contemplated given the intrinsic relationship.

CCA has exclusive rights to market CEA's belly capacity to 2032. The arrangement is via a complex formula that along with associated related transaction agreements, seems to work in CEA's favour. CEA's investment is safeguarded by IPO share caps. But the IPO is not the objective. It is a means to an end.

The planned listing on the Shanghai exchange is less a reflection of anything cargo related and more a statement from CEA that state-owned enterprises can succeed under mixed ownership reform, which CEA chairman, Liu Shaoyong, has personally supported.

Reducing the state's involvement challenged the conventional wisdom of many government officials. Liu's initial statements were unusually brazen in China's buttoned-up world of officialdom and he was the most outspoken, not just of airlines but the whole state-owned sector. It could be argued such reform is not just possible but necessary for survival. The unspoken implication is not about ownership but associated control. CEA wants less government interference. ■


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Come together to revive THAI pleads its president

By associate editor and chief correspondent, Tom Ballantyne

Thai Airways International (THAI), dealing with deepening losses revealed in its latest quarter, is attempting another recovery plan that includes an appeal to passengers to help solve the airline's problems.

"I have been president of THAI for 11 months and there has never been a day without a problem," said Sumeth Damrongchaitham last month. "Members of the THAI Board of Directors, management and staff recognize THAI as a national carrier and we have all been working hard but the problems we face cannot be easily solved."

Outlining a new survival strategy last month he said: "With these aforementioned strategies, we believe THAI will return to its position as one of the top world class airlines, although not as soon as we hoped.

"This depends on the support of Thai passengers who still love THAI. They can help by flying with our airline, using our services and by making recommendations under the #SaveTG concept. All employees and I are confident that we will accomplish our goal."

It's a big ask. Last month, the airline reported a second quarter loss of US$223.7 million, more than double the $100.5 million shortfall for the same period a year ago. Revenue plunged by 10%, to $1.4 billion, for the quarter.

THAI attributed its worsening numbers to a slowing global economy, fierce competition, especially from LCC and Gulf rivals, and an eight per cent fall in the Thai baht against the US dollar.

Within days of the results announcement, the THAI board directors of the government-owned airline said the carrier needed to address "external crises such as the strong baht, the U.S.-China trade war, sluggish global economic growth and closure of Pakistani airspace".

THAI also had to adjust to declining tourist numbers, reduced customer purchasing power and delayed aircraft engine repairs, board directors said.

Major measures to address THAI's troubled performance are the cost control strategy, SaveTG, where passengers can suggest ideas for savings at the carrier, a zero waste management plan, launching Bangkok-Sendai, its sixth destination in Japan, and investment in digital marketing.

THAI and THAI Smile will work more closely in developing network connectivity, assisted by the regional carrier becoming a Star Alliance connecting partner by year end. THAI is one of the alliance's longstanding members.

Sumeth also is unhappy about the open skies agreements negotiated by the Thai government, the Bangkok Post reported last month. The THAI boss complained the country's ministry of transport had agreed to unbalanced open skies with some countries that did not reciprocate in market access.

He said open skies policies combined with LCC growth had forced the airline to withdraw flights from Japan and other markets. LCC rivals, Thai AirAsia, NokScoot and Peach Aviation, have expanded Thailand-Japan flights with fares the flag carrier cannot match. ■

Jobs go at Virgin Australia, Qantas reports profit decline

Qantas Airways continues to pile up cash with its announcement last month of a bumper underlying profit before tax of US$880 million for the year to June 30. The numbers were down 17% from the record results of last year, with 2018-2019 performance impacted by a $416 million increase in fuel costs and $104.4 million in foreign currency losses.

Qantas Group CEO, Alan Joyce, defended the results given the mixed market conditions. "This result shows the strength of our individual businesses but also the strength of our portfolio as a whole. Even with headwinds like fuel costs and foreign exchange, we remain one of the best performing airline groups in the world."

It was a different story at rival, Virgin Australia, where new CEO, Paul Scurrah, reported an underlying pretax loss of A$349 million for the group, well down on a year earlier. Scurrah said 750 jobs are to go, business divisions will be merged and a review of operations will be undertaken to return the company to profit. "It will take some time to get us into the position we are planning on getting into," Scurrah said at the results announcement. ■

Independent MROs stand their ground against OEMs

Boeing's Services Market Outlook 2019-2028 has forecast the global aviation support and services 10-year market would be worth US$3.1 trillion to 2028, with an annual growth rate of 3.5%.

Commercial services, Boeing estimated, would be US$1.68 trillion for the decade, including the business and general aviation sectors.

Key trends at commercial airlines are improved management of MRO hours and aircraft down time, transfer of more work regimes from heavy shop checks to line maintenance, more pooling of inventory, adoption of retrospective and predictive maintenance driven by data analytics and greater application of maintenance planning tools.

At the other end of the spectrum, airlines, especially start-ups and LCCs, are not as willing as in the past to set up costly in-house MRO shops to service their fleets.

Global aviation MRO, Lufthansa Technik, told Orient Aviation the aftermarket does not need OEMs to provide a high quality and competitive service. It is well supported by existing MROs.

Lufthansa Technik vice president corporate sales Asia-

Pacific, Gerald Steinhoff, said: "It is certainly the case for base maintenance in the Asia-Pacific. Airframe OEMs have made a few attempts to enter the market by promising investments and partnerships, but we don't see the service improving."

"Component OEMs follow very different repair strategies, the regional Lufthansa Technik sales leader said. Parts and the supply chain are the largest sectors of the commercial airline aftermarket, which also is benefitting in availability from used serviceable materials from ageing retired aircraft.

The Boeing forecast said new generation aircraft will increase to 50% of the global fleet by 2028. MRO providers will need to invest in training, digital capabilities and infrastructure upgrades to support these aircraft types, in a labor market that will remain tight and force inter-country recruitment.

"Some OEMs would rather experience the efficient setup of base maintenance, which has excellent engineering and planning skills, volume and the highest quality standards that MROs offer," Steinhoff said.

"On the airframe OEM side, it is a differentiated picture. Boeing has not been too competitive in the Asia-Pacific while Airbus defined very challenging targets for its aftermarket share of new aircraft types.

"Specifically, on the A350,

Engine MRO strengthening ties with OEM

Asia is number one in the world for engine MRO volume in revenue terms. It produces a quarter of all shop visits, MTU Maintenance Zhuhai president and CEO, Jaap Beijer, told Orient Aviation last month.

"Asia's importance will continue to grow, also in terms of shop visits, which will represent well above one third ten years from now," he said.

"As most visits will be performed on narrow body engines, MTU Maintenance

Asia-Pacific largest market for GTF engines

"The Asia-Pacific represents a key market for Pratt & Whitney-powered aircraft platforms with more than 20 GTF engine customers and 260 GTF-powered aircraft operating in the region. It is 60% of the GTF fleet," Pratt & Whitney senior director after-market operations Asia-Pacific, Brendon McWilliam, told Orient Aviation last month.

"Asia-Pacific MRO demand will be more than 40 percent of the world's MRO support by 2036," he said.

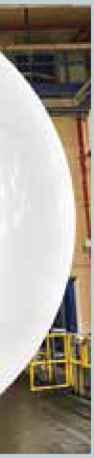
"In addition to meeting the growth generated by orders for nearly 10,000 GTF engines, Pratt & Whitney is investing in new technologies that include hybrid electric, advanced high-temperature materials, additive manufacturing and digital technologies.

"For operators to predict current and future MRO across their fleets, aircraft engine health monitoring is a critical activity. Pratt & Whitney's Flight Acquisition Storage and Transmission (FAST) system is designed to capture and analyze engine and aircraft performance parameters.

"When an aircraft equipped with Pratt & Whitney engines lands, the FAST system provides cellular transmission of engine and aircraft performance data from the aircraft to Pratt & Whitney, where a full-flight data intelligence report is produced to provide operators with information that can improve engine maintenance predictability.

"For GTF fleets, we're collecting significantly more data at different times in the flight

s for technology and licence access



Zhuhai, the largest narrow body shop in Asia, is ideally placed to serve this growth as an independent service provider.

"Generally speaking, there is increased OEM coverage for next generation engines. Independent providers will need to intensify their cooperation with OEMs to access engine MRO and potentially IP protected repair licences as well as MRO volume.

"At the same time, engines entering maturity, such as the V2500 and CFM56, will increasingly become available to independent MROs.

"MTU Maintenance Zhuhai believes it is very well positioned to work on next-generation engines – both through parent company, MTU Aero Engines, RRSP agreements with OEMs and its joint venture with China Southern.

"China Southern is China's largest airline group and introduced A320 and 737 MAX services in 2017. We count on them for base workload.

"As well, through its risk and revenue sharing partnership, MTU holds 18% in the Pratt & Whitney 1100G-JM program.''

this approach led to very strong competition with partially unrealistic and highly subsidized prices."

Despite that, at least two very strong independent MROs, of which Lufthansa Technik is one, are in the A350 market.

"It is the same with aircraft like the 320neo and 787. The air framers have created more competition, but now every competitor has to prove they can deliver what they have promised.

"Some component OEMs are stepping back from repair and joining forces with strong independent MROs. We see this in our partnership with Honeywell on the A350 and in China, where we are signing Meggitt, Honeywell and others to licence Lufthansa Technik Shenzhen for exclusive repairs."

The trend was reinforced with announcements at June's Paris Air Show that included US$1.5 billion in tailored agreements for Collins Aerospace from customers that spanned aero structures and power and controls units.

Leading Asia-Pacific carrier, Japan Airlines (JAL), signed up for Collins' FlightSense platform that will require the UTC-owned conglomerate to manage JAL's MRO supply chain, provide the carrier with on site inventory and improve shop visit efficiency.

AAR told our special report team the increasingly active participation of OEMs in the aftermarket is an opportunity and also a challenge for AAR and the MRO market.

AAR vice president sales Asia-Pacific, Colin Gregory, said the U.S. headquartered group uses its aftermarket experience and wide variety of services on all aircraft platforms to offer tailored solutions from a single independent supplier.

"There are a few consortiums starting to form in our industry that may deliver on the promise of shared data," he said.

"OEMS are moving rapidly to control and charge for use of their data. But as one of the largest MROs in the world, AAR generates much of the data it needs and always is finding new avenues to capture additional data.

"We are seeing an increasing number of OEMs enlisting us to support their parts distribution agreements with Airbus and Boeing fleets and improve their aftermarket distribution of new parts.

"AAR has recently reported great success in broadening the geographic reach, duration and bundled services in the existing contracts."

AAR has partnerships with more than 30 OEMs, which help it to supply military aircraft operators and commercial airlines with parts. Its OEM services group plans to open an MRO facility in India by year end. It always is looking for growth opportunities in the region, Gregory said. ■

envelope, including at engine start, limb-out and descent and more reports such as oil monitoring."

Pratt & Whitney also provides opportunities for customers to invest in virtual reality technologies that allow viewing of an running engine or examination of its parts without having to dissemble the whole engine.

Pratt & Whitney's GTF MRO network consists of Pratt & Whitney as well as engine program partners JAEC, MTU and LHT that provide GTF MRO maintenance.

"We are on track with plans," said McWilliam. "The GTF network spans three continents with active engine centers to date including IHI-Mizuho, Eagle Services Asia and soon MHIAEL in the Asia-Pacific.

"By 2020, we will ramp up GTF MRO capability to 10 active GTF MRO engine centers with three more to come online by 2020.

"For repairs, we have expanded our relationship with Hanwha Aerospace and are committed to up-skilling our workforce.

"As we become more automated, it will increasingly become important for skills in our workforce to include information and data processing.

"Mechanical engineering and so forth is still relevant for the aerospace MRO industry. It is not about software development but being able to take advantage of technology, interpret and apply the gathered information benefit, and adapting to the future needs of the industry."

Vietnam and China attract joint venture training partners

Vietnam is one of the fastest growing aviation markets in the region. Efforts to ensure a steady supply of pilots for its airline fleets include setting up foreign joint venture academies.

Bamboo Airlines, launched in January this year, may be one of Vietnam's newest airlines, but with 10 A320s in service and 77 more aircraft on order, including 30 787-9s, it has moved quickly to ensure it has the cockpit crew to fly its fleet.

In late July, it announced construction had started on an aviation academy in the central province of Binh Dinh that is scheduled to begin operations in 2022. Its goal is to train 3,500 students annually, including pilots, flight attendants, maintenance engineers and other aviation specialists.

And Bamboo is not alone. At the same time, BAA Training Vietnam, a European aviation training joint venture, announced the completion of its training centre in Ho Chi Minh City. The 3,000 square metre campus will accommodate four full flight simulators for A320 training.

Also on the drawing board is a facility planned by yet-to-fly newcomer, Vinpearl Air, which is owned by Vietnamese conglomerate, Vingroup. It has its AOC and aims to fly 30 aircraft to domestic and international destinations.

Vinpearl has signed a co-operation agreement with Canada's CAE Oxford Aviation Academy to train pilots, flight technicians and other personnel and provide high-tech resources for Vietnam and the world. Under the agreement, the VinAviation School and Vinpearl Air Training Centre will be established in Vietnam.

Once Vinpearl takes to the air, the country will have six airlines: Vietnam Airlines, Jetstar Pacific, Vietjet Air, Bamboo Airways, Vasco and Vinpearl Air. The country's transport ministry has targeted average annual growth for the aviation sector of 16% to 2020 and 8% for the next decade.

Bamboo's academy, costing $30 million, will be located in the Nhơn Hội Economic Zone in Quy Nhơn City. It is the first of several training facilities that will include academies in Quảng Ninh, Hải Phòng and Vĩnh Phúc.

At the Quy Nhon City ground-breaking ceremony, Bamboo signed deals with the New Zealand Aviation Academy to train pilots to meet international standards and also contracted with the University of Engineering and Technology, under the Việt Nam National University, to improve the quality of crew training and to conduct joint scientific research.

Bamboo Air's permanent vice chairman, Đặng Tất Thắng, said the academy would work with universities in Việtnam and overseas to boost aviation training standards and connect with the world's OEMs to train

> The growing diversity and mobility of aviation personnel will require instructors to have cross-cultural, cross generational and multi-lingual skills to engage with tomorrow's workforce. Effective training and an adequate supply of personnel will remain critical to maintaining the health and safety of the entire aviation ecosystem
>
> Boeing pilot and technician global forecast 2019-2038

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skilled aviation workers.

BAA Training Vietnam said its A320ceo full flight simulator (FFS) is being assembled. The first A320 type rating pilot cadet intake began training last month.

"The Vietnamese aviation market has been growing by an average 8% per year and is expected to continue its growth in the next 20 years," said BAA CEO, Egle Vaitkeviciute, "Airlines in Vietnam keep announcing fleet expansion plans. The national carrier alone has recently revealed it would acquire 50 new narrow-body aircraft including the A320.

"With our modern training facilities and equipment, experience and deep know-how we are ready to accommodate Vietnamese pilots with European standard aviation training solutions."

In China, Avia Solutions and Henan Civil Aviation Development and Investment Company have established a joint venture, BAA Training China. Based in Zhengzhou Airport Economic Zone, adjacent to Zhengzhou Xinzheng International Airport, it is intended to become a crew training academy of choice for Mainland carriers.

The $60 million BAA Training China centre, which will operate under a franchise licence, will have six full flight simulators from the A320 and 737 families. The first simulator is scheduled to be ready for training in the second half of next year.

BAA Training China aims to train 4,000 pilots a year, provide up to 40,000 simulator hours annually for new and current cockpit crew and offer 30,000 hours in theoretical courses in each 12 months.

Boeing's global pilot and technician outlook forecasts Asia-Pacific demand for 244,000 new pilots, 249,000 technicians and 323,000 cabin crew in the next two decades. Demand will be driven by a mix of fleet growth, retirements and attrition, Boeing said.

Future solutions to ensure sufficient crews to operate the region's expanding fleet are immersive technologies, adaptive learning, schedule flexibility and new teaching methods to meet a wide range of teaching styles, Boeing said. ■

Qantas pilot academy ready for first student intake

Qantas's first pilot training academy will accept its inaugural cadet intake this month although the south eastern Queensland Wellcamp Airport campus will not formally open its doors until January. For the final months of this year, students will be based at the University of Southern Queensland while construction of the complex of hangars, classrooms and student accommodation is completed.

Training at the Toowoomba academy will be conducted by Flight Training Adelaide (FTA), which was established in 1982 to focus on producing future airline captains. When plans for the academy were announced a year ago, L3 Commercial Aviation was named as the training provider for the academy, but the U.S. company withdrew from the project last March and FTA was awarded the training contract. Senior Qantas pilots will participate in the mentoring program, the airline group said.

The academy aims to produce cockpit crew for its three airlines, Qantas, Jetstar and Tigerair, but also attract third party training customers to its courses. FTA will manage the student selection process, conduct ab initio and advanced training courses and operate the student accommodation facilities.

FTA will use Diamond DA40 single engine and the DA42 multi-engine aircraft for the training program.

In July, Qantas confirmed it had chosen Mackay, also in Queensland, for the pilot academy's second campus. The far northern Queensland coastal city "offered uncongested airspace, access to support infrastructure, a high proportion of good weather days a year, optimal flying conditions and a sunny Queensland lifestyle which makes it an ideal place for a pilot academy", a Qantas Group spokesman said.

Qantas aims to graduate industry ready pilots and will offer students the option to join the Qantas Group Future Pilot Program, which gives access to career development support and mentors. To support diversity, three-year scholarships are available for women in aviation and Aboriginal and Torres Strait Islanders. ■

Training trends

- Pilot training is evolving to proficiencies and competencies rather than a standard syllabus to ensure pilots are effectively trained to handle operational risks and are assessed for key skills all pilots must possess.
- As new generation aircraft arrive in the global fleet. advances in airplane technology will demand a new set of skills from aircraft technicians, including digital troubleshooting and composite repair.
- Mobile and distance learning are supplementing traditional classroom instruction which allows students to continue their studies outside instructor-student classes.
- Demand for cabin crew will increase as airlines up-gauge aircraft, operate denser seat configurations and multiple cabin interior layouts.
- Scenario-based training and mobile learning technologies will increasingly support continuous learning for cabin crew.

Source: Boeing Pilot & Technician Outlook 2019-2038

China Southern Airlines introduces digital BAGTAG for domestic and global flights

An electronic luggage tag, developed by five-year-old **BAGTAG** of the Netherlands, has found a customer in China Southern Airlines (CSA), Asia's largest airline and one of the world's fastest growing carriers.

Last month, CSA passengers departing **Guangzhou Baiyun International Airport** began checking their baggage with BAGTAG, a digital luggage label that does away with paper tags.

This month the system will be extended to the new **Daxing Beijing International Airport** and several other domestic airline terminals.

BAGTAG managing director, Jasper Quak, said the system, also an end-to-end secure platform, was developed with several major airlines and was launched with Lufthansa group carriers last year.

It attaches to all luggage types and replaces thermal paper stripes and provides enhanced readability of e-paper display and RFID technology, Quak said.

CSA senior director produce and services, Twinkle Li, said the carrier "was very proud to be the first airline in China to introduce electronic bag tags". "Electronic bag tags are a big step forward," she said. "With this paperless solution, passengers can save significant time at airports. It offers us a turnkey solution for electronic baggage tags that is very easy to integrate and works worldwide," Li said.

At Greater Tokyo's Narita International Airport, global self-service bags solution provider, **Australia's ICM Airport Technics** will install 72 Auto Bag Drops in time for the Tokyo Olympics in 2020. The multi-lingual 7 ABD system will be rolled out progressively at all four Narita terminals. Owned by **Amadeus**, the manufacturer has sold more than 1,100 auto drop bag units to 39 airports. ■

NEC and Star Alliance make pact to advance biometric data recognition technology

Japan's NEC Corporation and the world's largest airline alliance, Star, have formed a research partnership to develop a biometric data-based identification platform that will improve interaction with the frequent flyers of its carrier members.

When implemented, the interoperable platform offers Star alliance customers to opt in to a facial recognition process that will take them through every stage of their airport journey without a passport or a boarding pass.

Using mobile devices, Star Alliance frequent flyers enroll once only to activate their biometrics data at check-in kiosks, bag drop, lounges and boarding gates.

Personal data can only be processed with the consent of the passenger. The information, including a photo and other identification details are encrypted. At some airports, passengers may still be required to show their passports during security and immigration procedures.

President and CEO of NEC Corporation, Takashi Nino, said: "In support of this partnership, similar to our implementations in the U.S., Singapore, Hong Kong and Japan, NEC will provide local assistance to each of the member airlines to bring our common vision to reality."

The first biometric solution for Star members will be launched in the first quarter of next year. ■

LEASING

Vietnam Airlines accepts first 787-10 from ALC

Air Lease Corporation (ALC) delivered the first of eight 787-10s to **Vietnam Airlines** last month. The eight aircraft will be powered by GEnx-1B74/75 engines.

ALC executive chairman, Steven F. Udvar-Hazy, said the firm was the first lessor to lease the Dreamliner -10 to the Vietnamese flag carrier. The Los Angeles-headquartered lessor will complete delivery of the eight aircraft, from ALC's order book with Boeing, by 2021.

Separately, the **Qantas Group** has signed a Letter of Intent with Luxembourg-headquartered **Vallair** to lease an A321P2F aircraft conversion with delivery scheduled for next year. The Australian carrier will be the first airline in the world to fly the A321 as a freighter. The aircraft will operate as part of the recent alliance established between Qantas and **Australia Post**. ■

Willis Lease Finance posts strong quarterly profit

Willis Lease Finance has reported a pre-tax profit of US$21.8 million for the three months to June 30, on revenues of $95.8 million, an increase of 21.7% over the same months a year ago.

Quarterly maintenance reserve revenue rose by 20.1% or $4.4 million, to $26.5 million, and spare parts and equipment sales improved by 25.2%, to $14.6 million. ■

MRO AND COMPONENTS

SR Technics signs exclusive engine agreement with Turkish LCC

Turkish LCC, Pegasus, has entered into a long-term CFM56-5B engine maintenance deal with global MRO provider, **SR Technics**.

Pegasus is Turkey's largest LCC and the second biggest airline in Turkey after flag carrier, **Turkish Airlines**. It has a network of

111 destinations in Central Asia, Europe, the Middle East, Africa and Asia,

SR Technic's partnership with Pegasus is scheduled to commence next month, the first of 22 engine shop visits in the contract. The agreement includes an SR Technics lease engine dedicated to the LCC over the six-year contract term. All work on the Pegasus LCC engine will be undertaken at the MRO's workshop in Zurich. ■

Embraer and Mongolian Hunnu Air agree to E190 pool parts program

Brazil's **Embraer** and E190 customer, **Mongolian Hunnu Air**, have signed a long-term components pool program agreement for the airline's leased E190 fleet. Hunnu Air accepted its first E190 last May.

A major carrier in Mongolia, Hunnu Air's agreement with Embraer includes full repair coverage for components, parts and access to Embraer's distribution centre.

Hunnu Air CEO, Munkhjargal Purevjal, said "direct support from the manufacturer will secure a highly reliable operation of our E190 fleet, guarantee competitiveness and availability of the aircraft factors critical to our daily operations and passenger satisfaction".

To expand its network, the carrier has leased four E190s from **CDB Aviation**. The first of the jets was delivered to Hunnu Air in May with the three other leased planes scheduled to join the carrier from 2020 to 2021. ■

Australia's Heston MRO launches components unit

Brisbane-headquartered **Heston MRO** has opened a components unit as part of its strategy to become a Total Technical Care provider for its customers in Australia and the Pacific.

Initially, the new components unit will focus on trading, repair, exchanges and leasing of components to customers in Australasia and the Southwest Pacific.

Heston MRO head of components, Paul Popow, said adding components and materials services to the 20-year-old company's portfolio was a strategic advance intended to support the goal of becoming a Total Technical Care centre.

The MRO will build its stock of most frequently removed items in each 12 months and will offer packages for flat rate exchanges, fixed price repairs and power-by-the-hour to lessor, OEM and airline customers. ■

Asiana Airlines and Lufthansa Technik do deal for component support

Asiana Airlines has confirmed a new 10-year contract with **Lufthansa Technik** for Total Component Support (TCS) for the Korean international carrier's A320-A321neo family, which will number 79 aircraft.

The contract allows for future conversion to Total Component Maintenance or closed loop component repair and overhaul support in the mid-term.

Partners for 25 years, the MRO also provides component maintenance for the airline's 777-200ERs, A330s and A350s, heavy maintenance for its A380s and support for the fleet's V2500 and CF6 engines. ■

AIRLINE DISTRIBUTION

Hahn Air inaugurates NDC platform

A global leader in airline distribution and German airline and ticketing group, **Hahn Air**, has unveiled its NDC (New Distribution Capability) platform, a solution powered by the **International Air Transport Association's (IATA) NDC** standard, on scheduled flights between Luxembourg and Dusseldorf.

Hahn Air NDC boss, Christopher Allison, said the company "was leveraging" on the expertise acquired from operating for 20 years in airline distribution as well as from being one of the first partners to work with IATA on its evolution of NDC.

All travel agents can participate in Hahn Air's NDC while continuing to use their preferred payment systems in any market.

Benefits to airlines, said Hahn Air, are the ability to incorporate an additional distribution channel in their offerings to users and have an NDC platform without paying the cost of developing their own solution. ■

IATA expands user-friendly access to New Distribution Capability

Last month, the International Air Transport Association, (IATA), unveiled web-based tool, **NDC Matchmaker**, that introduces more visibility to partners collaborating and utilizing the New Distribution Capability.

At press time, NDC Matchmaker had 80 connections between airlines and their travel seller partners.

NDC Matchmaker was a response to the need of corporate travel buyers to have greater insight into airlines, travel sellers and aggregators using NDC, **IATA director industry distribution programs, Yanik Hoyles**, said. ■